

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 February 2004 (26.02.2004)

PCT

(10) International Publication Number  
**WO 2004/016643 A3**

(51) International Patent Classification<sup>7</sup>: **A01N 37/18**,  
A61K 35/00, 39/00, 48/00, C07H 21/04, C07K 7/00

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(21) International Application Number:  
PCT/US2003/023503

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(22) International Filing Date: 28 July 2003 (28.07.2003)

(25) Filing Language: English

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:  
60/403,657 16 August 2002 (16.08.2002) US

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(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:  
— with international search report

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(88) Date of publication of the international search report:  
30 June 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: TUMOR ASSOCIATED ANTIGEN, PEPTIDES THEREOF, AND USE OF SAME AS ANTI-TUMOR VACCINES

(57) Abstract: The invention relates to colon and prostate tumor associated antigen peptides obtainable from prostate specific G protein-coupled receptor (PSGR), six-transmembrane epithelial antigen of prostate (STEAP) and proteins encoded by genes found overexpressed in colon carcinoma cells, such as human 1-8D interferon induced transmembrane protein 2. The invention further relates to a polynucleotide encoding the tumor associated antigen peptides and to pharmaceutical compositions, which are preferably anti-tumor vaccine compositions, containing a tumor associated antigen, at least one tumor associated antigen peptide thereof, or encoding polynucleotide thereof as an active ingredient. The pharmaceutical compositions can be administered to a patient in need thereof to treat or inhibit the development of colon or prostate cancer.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/23503

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A01N 37/18; A61K 35/00, 39/00, 48/00; C07H 21/04; C07K 7/00  
 US CL : 530/328; 514/2, 15, 44; 424/93.21, 277.1; 536/23.5

According to International Patent Classification (IPC) or to both national classification and IFC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 530/328; 514/2, 15, 44; 424/93.21, 277.1; 536/23.5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 200140276 A2 (AFAR et al.) 07 June 2001 (07.06.2001); see entire document, particularly Example 11 at page 94.	1-61
Y	WO 200196388 A2 (JIANG et al.) 20 December 2001 (20.12.2001); see entire document, particularly SEQ ID NO: 677 and claim 1.	1-61

Further documents are listed in the continuation of Box C.

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\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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Date of the actual completion of the international search

08 March 2005 (08.03.2005)

Date of mailing of the international search report

13 APR 2005

Name and mailing address of the ISA/US

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 Commissioner of Patents  
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 Alexandria, Virginia 22313-1450

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INTERNATIONAL SEARCH REPORT

PCT/US03/23503

**Continuation of B. FIELDS SEARCHED Item 3:**

WEST, MEDLINE, GENESEQ, PUBLISHED APPLICATIONS, GENEMBL, ISSUED PATENTS, UNIPROT: SEQ ID NOS: 27, 41, 61;  
colon; pancreas; cancer; treatment; vaccine; diagnosis; overexpression; PSGR; STEAP